To: Gravatt, Dan[Gravatt.Dan@epa.gov]; Washburn, Ben[washburn.ben@epa.gov]; Field,

Jeff[Field.Jeff@epa.gov]; Asher, Audrey[Asher.Audrey@epa.gov]; Hammerschmidt,

Ron[Hammerschmidt.Ron@epa.gov]

From: Tapia, Cecilia

Sent: Fri 12/20/2013 5:17:41 PM

Subject: RE: Your e-mail on USGS roles at West Lake Landfill

Saved to H: Westlake Tracker/Community-MCE-EJ correspondence

From: Gravatt, Dan

Sent: Friday, December 20, 2013 9:55 AM

To: Traci Vette

Cc: WestLakeCAG@gmail.com

Subject: RE: Your e-mail on USGS roles at West Lake Landfill

Ms. Vette,

Karl asked me to respond to your questions below. Thank you for your interest in the USGS role in assisting EPA at the West Lake site.

Just to clarify, EPA, not USGS, collected samples from six privately-owned water supply wells to the north of the site in July 2013. EPA collected these samples to help understand the background concentrations of contaminants in the shallow alluvial aquifer. You are correct that the owners of four of the six wells gave us permission to share their results with the public, and EPA will provide those results to State Senator Bill Otto in response to his request for this data during the December 16th CAG meeting. These wells were analyzed for metals, volatile organic compounds, and isotopes of uranium, thorium and radium. The analytical results for the four wells we are able to share with the public showed that all contaminants were below their maximum contaminant levels (MCLs) for drinking water established in the Safe Drinking Water Act. Note that not all of the contaminants have MCLs established for them.

In addition, the USGS has been identifying and sampling additional privately-owned water supply wells to the south and west of the site in recent months. The purpose of this off-site sampling is to help understand the background concentrations of contaminants in both the shallow alluvial and deep bedrock aquifers near the site. USGS has been able to sample approximately five of these wells. It is still receiving and conducting quality assurance checks on the sample results, so the results are not yet available to EPA.

You asked what items the USGS was assisting the EPA with, and there are three general areas of assistance:

- USGS is helping EPA establish background levels of contaminants in the alluvial and bedrock aquifers around the site, particularly for uranium, thorium and radium. In addition to collecting and analyzing samples from off-site wells, USGS is reviewing available data from other sources.
- USGS is helping EPA understand the direction and speed of the movement of groundwater underneath and around the site, and how contaminants may be moving in groundwater. The general direction of groundwater flow in the area is known, but there may be small-scale changes in the direction of movement underneath the site. USGS is receiving data from all of the recent groundwater sampling events and will provide EPA with a comprehensive analysis that answers these questions. Once the final set of data for the October 2013 sampling event is received from the potentially responsible parties (PRPs) who conducted the sampling, EPA expects that it will take USGS several months to provide that comprehensive analysis. EPA intends to release USGS' comprehensive analysis to the public as part of the re-evaluation of potential remedies that EPA is currently performing.
- Finally, USGS is helping EPA evaluate many of the reports and documents provided by the PRPs and other parties to ensure that the reports are technically accurate. This is ongoing assistance to EPA that may continue for much of the re-evaluation of potential remedies that EPA is currently performing.

If you have other questions, please contact me by e-mail or at the telephone number below.

Sincerely,

Daniel R. Gravatt, PG

US EPA Region 7 SUPR/MOKS

11201 Renner Boulevard, Lenexa, KS 66219

Phone (913) 551-7324

Principles and integrity are expensive, but they are among the very few things worth having.

From: Traci Vette Ex. 6 - Personal Privacy

Sent: Tuesday, December 17, 2013 9:58 AM

To: Gravatt, Dan; Brooks, Karl

Subject:

Good afternoon Dan & Karl! (I guessed on Dan's email address, I'm not sure if this will get to him).

First I'd like to thank you for your time last night at the CAG meeting. It was the first meeting I have attended, and I'm looking forward to the next one. I really felt there was a lot of good information exchanged last night. Unfortunately, there was not enough time for all of the questions to be answered.

The purpose of my email is for clarification regarding the relationship between the EPA and the USGS. I'm very thankful to hear the EPA is working with the USGS to figure out what is going on regarding the ground water concerns with the West Lake/Bridgeton landfill. It's reassuring to me to hear the EPA is hopefully using all of its avenues to help us with the "nightmare" we are living with on a daily basis. I just want to make sure that I understood what was stated last night. This is a question the community has been asking and it seems no one seems to have a clear answer. I'm looking forward the results of the studies regarding this information.

It is my understanding that the USGS did some well monitoring at six (6) different locations "away" from the area in question (West Lake/Bridgeton landfill). I understand only four (4) of the 6 locations agreed for the information to be shared, and these results will be shared with Bill Otto. I thought I heard that these 6 locations were north of the area in question, and there were NOT any tests performed relating to the ground water towards the produce areas that are located southwest of the area in question, correct? If this is correct, will this area located to the southwest of the area in question be tested? I also understand the results of the 4 well locations that were tested, the results were what was more or less hoped to find, there were not any dangers levels of Radium 226 & Radium 228.

It is also my understanding that the direction and flow of the underground water is unknown; this is something the USGS is also working on. A better understanding is needed regarding why there are fluctuations with the readings that have occurred within the area in question. It is also my understanding that no one knows where there water is going, where it will end up and that is another thing the USGS is working on as well, correct? I realize the actual water table level could have some affluence with these results as well.

At the end of the meeting, I asked what items the USGS was assisting the EPA with, however there were several people around me discussing other matters, and I was

unable to fully hear the answer to my question. I understand how it was at the end of the meeting and there were a lot of anxious people in the room. Instead of staying after knowing the two of you were going to be flooded with additional questions, I felt it would be easier and a better use of all of our time, if I sent this email asking for that clarification. If you could provide me with that information again, I would really appreciate it. I know the assistance with the testing of the "outside" 6 wells was one of the items they are helping with, however the remaining items were unclear to me, due to the close background noise I was hearing. As I previously stated, it's reassuring for me, knowing there are additional eyes reviewing this situation.

I also understand that there is not a definitive time frame where the EPA expects the reports from the USGS. Does the EPA have an idea when they *might* expect these results and how soon after the EPA receives these results, will this information be released to the public?

Thank you for your time last night and the time you are taking to read and respond to my email. I really appreciate it. The community appreciates it as well.

Sincerely,	
Traci Vette	
Traci	